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# Program 1 : Preparedness Program for Reduction of Disaster Impact

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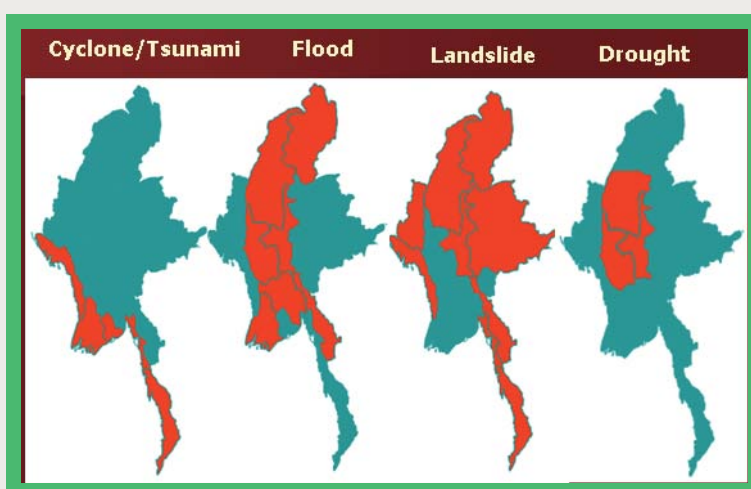
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# Preparedness Program for Reduction of Disaster Impact.

Proposer Information		<b>Aye Aye Soe</b> Student at Department of Civil and Earth Resources Engineering, Kyoto University
Aims of Education/training		Knowledge, Interest, Desire, Actions
Target User	Type	Self learning, Education/training
	Direct user	School teachers, NGO/NPO staff, Community leaders, Government staff, Researchers, Citizen, Students
	Trainee/ Indirect User	Students (Elementary school, Junior high school, High school, College/ University, Graduate school or higher), Organization staff/Officer, Local residents, Citizen
Focus of this Information		Process Technology (PT)
Hazards		Tsunami, Cyclone/ Typhoon, Storm surge, Flood
Type of Education/training		Lecture, Experiment, Training Camp, Group discussion, Self learning
Media/Material		Articles, Textbook, Presentation, Guideline, Pamphlet, Self learning book, Poster, Movie, Photos, Illustration/Cartoon
References		DRH-19, DRH-53, MIMU website, DMH website,



# Learning about Cyclones

## *Required for Cyclones to Occur*

- Cyclones in the South Asian region originate primarily from the Bay of Bengal.
- There are some pre-existing favorable weather conditions, higher sea temperature, and lower level cyclonic circulation.
- The life time of cyclones in the Bay of Bengal is about 4 to 5 days, according to the geography of Bay of Bengal. And they move initially north or northwest in low latitude and recurve to north or northeast around 18 degrees north latitude by the interaction of cyclone vertical structure and its environments.

## *Cyclone Nomenclature*

1. Low Pressure Area: less than 32mph
2. Depression: 32-38mph
3. Cyclonic Storm: 39-54mph
4. Severe Cyclonic Storm: 55-72mph
5. Very Severe Cyclonic Storm: 73mph and above

## *Color Coding Scheme for Cyclone Alert*

### Yellow Color Stage

Yellow color means a storm is formed but it not moving towards Myanmar coasts.

### Orange Color Emergency Stage

Orange color means the storm is heading towards Myanmar coasts.

### Red Color Emergency Stage

Red color emergency stage means the storm is heading towards Myanmar coasts and might cross within the next 12 hours.

### Brown Color Emergency Stage

Brown color emergency stage means the storm is crossing Myanmar coasts currently.

### Green Color Stage

Green color stage means the storm has abated and the situation is clear from storm.

## Cyclone Season in Myanmar

- Myanmar has two cyclone seasons: Pre-monsoon months from mid-April to mid-May and post-monsoon months of October and November.
- The Department of Meteorology and Hydrology closely monitors the formation of cyclone in the periods by means of daily weather maps, upper air observation maps, numerical weather forecast products, and satellite images.
- Our main responsibility is to issue timely cyclone news and warning to higher authorities, local authorities, relevant ministries, departments, and to the public for emergency response, prevention, and disaster risk reduction.

## Cyclone Warning/News

- Access latest weather news especially during the storm season.
- Check every cyclone which forms over the Bay of Bengal and come toward and cross Myanmar coasts.
- Check sections of the Bay Bengal and adjoining Myanmar coasts.
- [Cyclone News](#) will come out if the cyclone is moving away from Myanmar while [Cyclone Warning](#) will be issued if the cyclone is heading toward Myanmar.

## Storm Surge Characteristics

- The term storm surge is the abnormal rise of sea level forced by meteorological conditions like storm's central pressure and its maximum sustained wind.
- During the passage of a cyclone, the right side of landfall areas is the maximum storm surge area in the Northern Hemisphere.
- Height of storm surge combined with normal astronomical tide during the crossing closely link with the nature of topography, depth of coastal shelf, intensity of storm, and angle of cyclone strike to the coasts, in general.
- Characteristics of storm surge are similar with tsunami but are different in mechanisms. The Rakhine coasts and Deltaic areas are vulnerable to storm surge and tsunami.

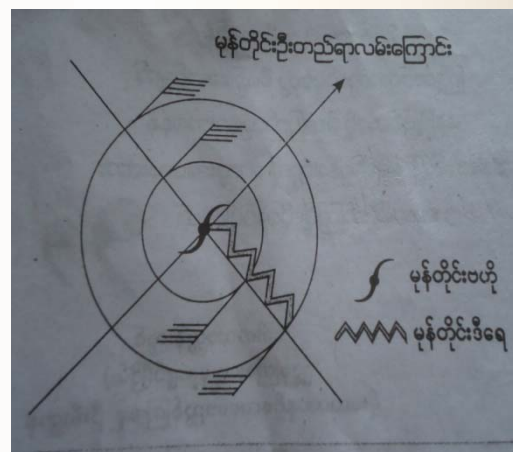


Figure (1) Storm direction and storm surge position

# Preparing for Cyclones in Our Region

## Before the Cyclone

1. Observe the local weather and listen to updated weather news.
2. Recognize the shortest way to a safer place and shelter.
3. Do not spread rumors, nor listen to them, only official version of the warnings may be listened to through radio/FM radio.
4. Prepare the emergency tool kits for your safety.
5. Make sure that your radio set is fully serviceable. Keep an extra set of batteries.
6. Check your house, repair doors and windows, whenever necessary.
7. Check the way to the evacuation site and/or shelter in advance if your location is at risk to the storm surges.
8. Be sure to prepare a contact list to be able to get in touch with local Search and Rescue Team, Local Authority, Emergency Response Team, and Health Care Unit.
9. Prepare dry and instant food, medicine, radio, clothes, batteries, and purified water.
10. Participate in the drills for emergency response and search and rescue to reduce disaster risks.

## During the Cyclone

1. Cut off power and gas.
2. Stay in a secure place if your building is going to collapse because of the storm wind.
3. Please do not go to the sea when you receive a severe weather and storm warning.
4. Please go to a safer place and/or shelter as soon as possible.
5. Listen to the latest updated weather news continuously.
6. Please wait and see at the safer place until the clear signal is given by the authority concerned.
7. If you are driving, stop and remain where you are if you are far from the sea, big trees, electrical power lines, reservoirs, dams, etc.

## After the Cyclone

1. Do not go outside without the clear and green color signal.
2. Check for gas leakage and cut electrical power lines for your safety.
3. Follow the news and instructions carefully from the local incident command agency.
4. Do not go back to your residence without any permission from the authorities concerned.
5. Beware of snakes if you are going by the road.
6. Any loose and hanging wire from the lamp post should be strictly avoided and inform the nearest electricity supply office immediately when you see one.
7. Beware of the danger of fire.
8. Beware of cholera outbreak.
9. Participate in and cooperate with the Local Emergency Response services.

## Please Take Note of the Following Cyclone Warning Information

1. Distance between storm position and your location.
2. Distance between storm path and your location.
3. Intensity of storm, expected location of landfall, and your location.

Check the cyclone and tidal characteristics of your location.

Reference: DMH, Pamphlet for Disaster Reduction

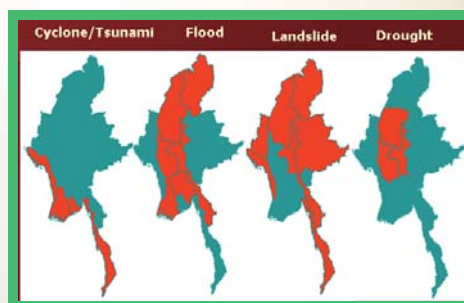


Figure (2) Disaster Prone Areas in Myanmar